An Integrated Data Management Model For Smart Investment and Easy Access

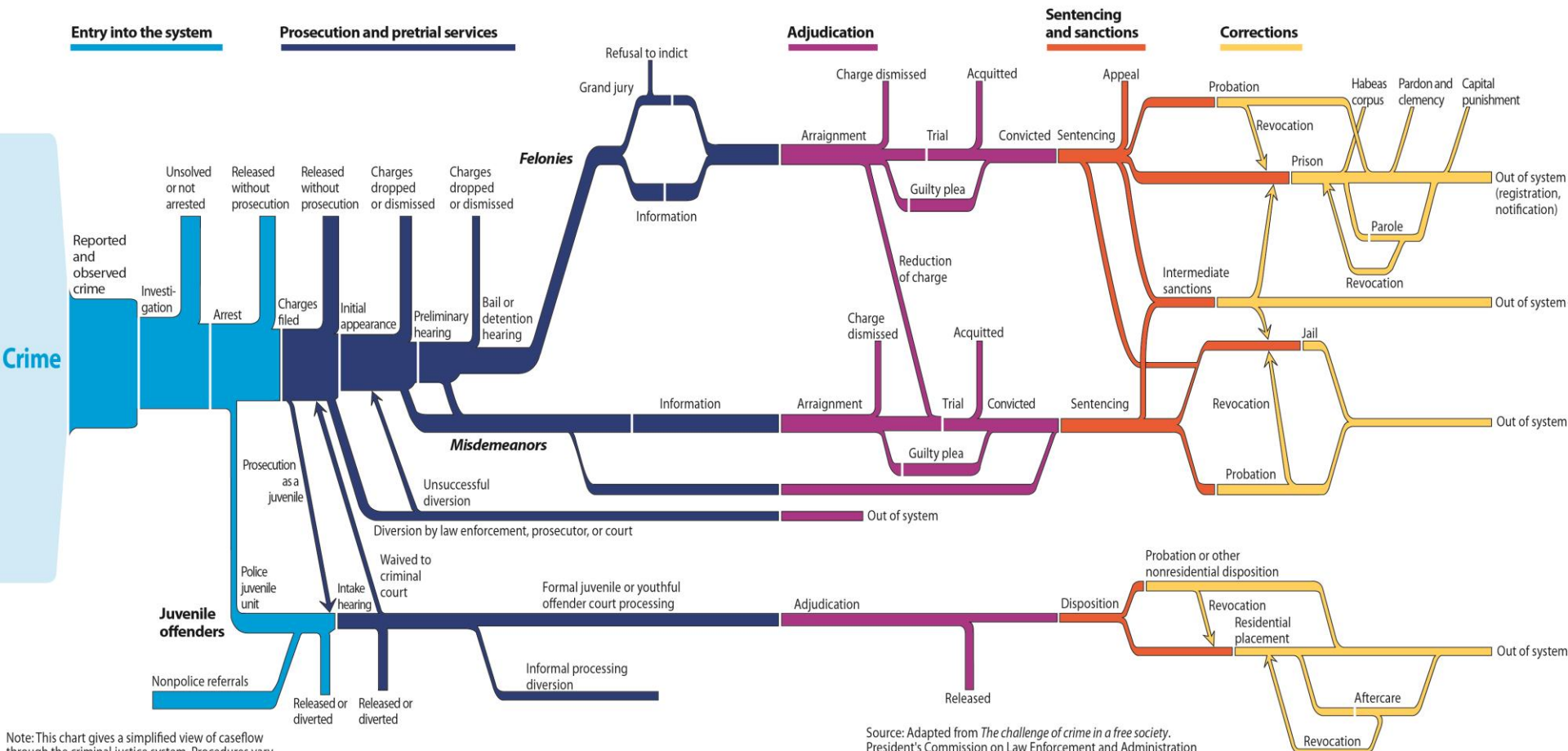## Bureau of Justice Statistics

November 14, 2013

The BJS Mission

Provide accurate, timely, and objective information to Federal, State, and local policymakers, to assist them in combating crime and ensuring that justice is efficient and evenhanded.

Key activities:

1. Collect and analyze data

2. Release publications web applications

3. Provide financial and technical support to states and locals

4. Maintain trust, relevance and credibility within the criminal justice field
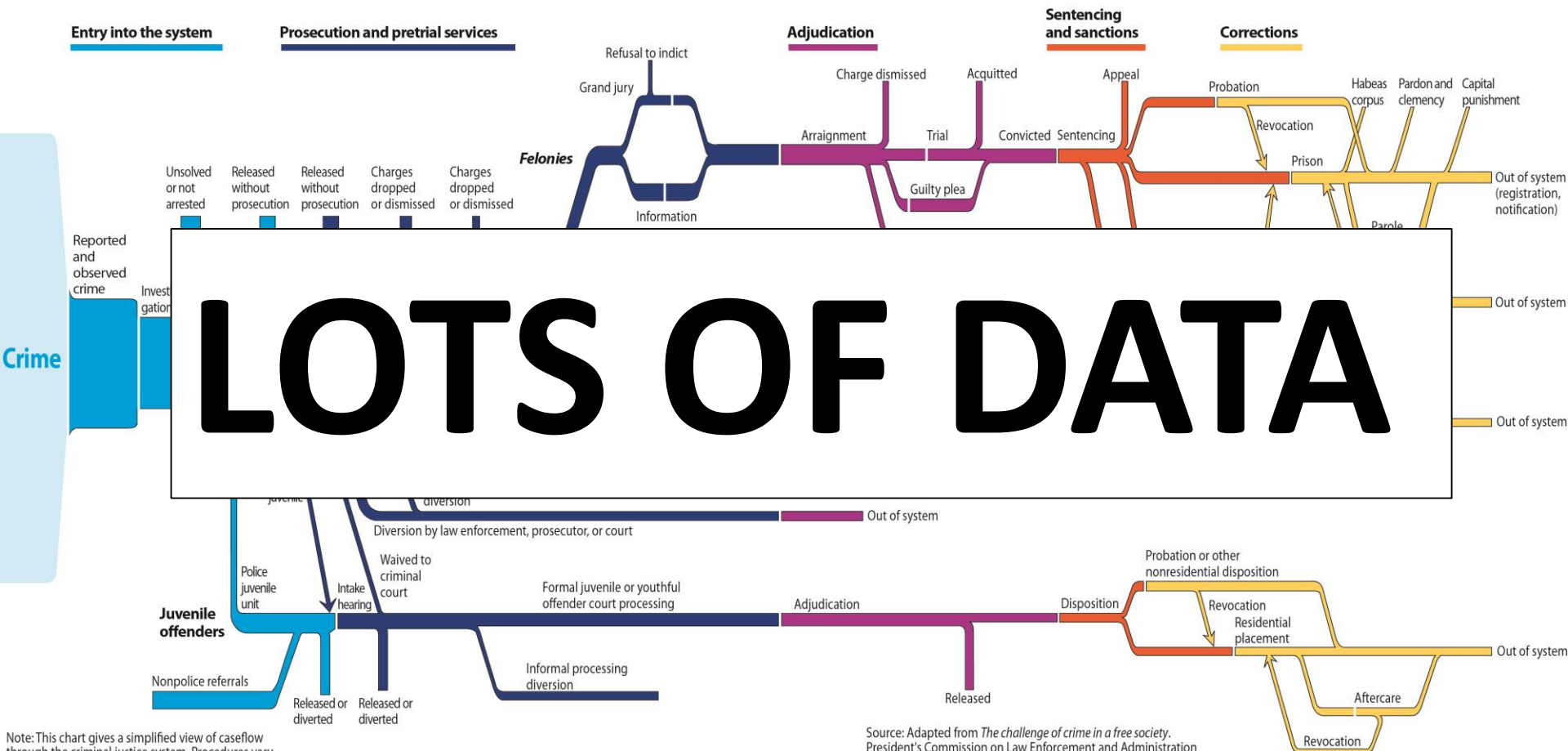
What is the sequence of events in the criminal justice system?

Entry into the system

Prosecution and pretrial services

Adjudication

Sentencing and sanctions

Corrections

Refusal to indict

Grand jury

Charge dismissed

Acquitted

Appeal

Probation

Habeas corpus

Pardon and clemency

Capital punishment

Unsolved or not arrested

Released without prosecution

Released without prosecution

Charges dropped or dismissed

Charges dropped or dismissed

Felonies

Arraignment

Trial

Convicted

Sentencing

Revocation

Prison

Reported and observed crime

Investigation

Arrest

Charges filed

Initial appearance

Preliminary hearing

Bail or detention hearing

Information

Guilty plea

Reduction of charge

Parole

Crime

Charge dismissed

Acquitted

Revocation

Intermediate sanctions

Out of system (registration, notification)

Out of system

Information

Arraignment

Trial

Convicted

Sentencing

Jail

Revocation

Prosecution as a juvenile

Misdemeanors

Guilty plea

Probation

Out of system

Unsuccessful diversion

Diversion by law enforcement, prosecutor, or court

Out of system

Police juvenile unit

Waived to criminal court

Probation or other nonresidential disposition

Juvenile offenders

Intake hearing

Formal juvenile or youthful offender court processing

Adjudication

Disposition

Revocation

Residential placement

Nonpolice referrals

Released or diverted

Released or diverted

Informal processing diversion

Released

Aftercare

Out of system

Revocation

Note: This chart gives a simplified view of caseflow through the criminal justice system. Procedures vary among jurisdictions. The weights of the lines are not intended to show actual size of caseloads.

Source: Adapted from *The challenge of crime in a free society*. President's Commission on Law Enforcement and Administration of Justice, 1967. This revision, a result of the Symposium on the 30th Anniversary of the President's Commission, was prepared by the Bureau of Justice Statistics in 1997.

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LOTS OF DATA

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Dissemination approach:

- ❖ Publications, tables, and data access tools published on BJS.gov

- ❖ Raw data, metadata and codebooks archived at the NACJD

- ❖ Data and information hosted elsewhere (Data.gov, NCJRS)

Issues encountered:

- ❖ Multiple data access tools with variant interfaces

- ❖ Manual management of collection metadata on multiple websites

- ❖ Data embedded within documents and display layers

Open Data Policies:

❖ Federal Digital Government Strategy [5/23/12]

❖ Federal Open Data policy (M-13-13) [5/9/13]

New Media Opportunities:

❖ Application Programming Interfaces (APIs)

❖ Secure cloud hosting

❖ Data visualization tools

❖ Social media

❖ Open source communities

BJS strategic goals

- ❖ Adopt a data-centric approach to dissemination

- ❖ Generate open data by default

- ❖ Improve timeliness, accuracy and relevance of products

- ❖ Streamline core business processes

- ❖ Increase engagement with customers to assess needs

- ❖ Use common standards and shared platforms

Getting started with APIs

- ❖ Increases the reach of your services

- ❖ Saves time and costs

- ❖ Speeds product development and ability to change

- ❖ Build once, re-use everywhere

The National Crime Victimization Survey (NCVS) API

- ❖ Benefits:

  - ❖ Provides developers and researchers with enhanced access to the NCVS data in machine-readable formats
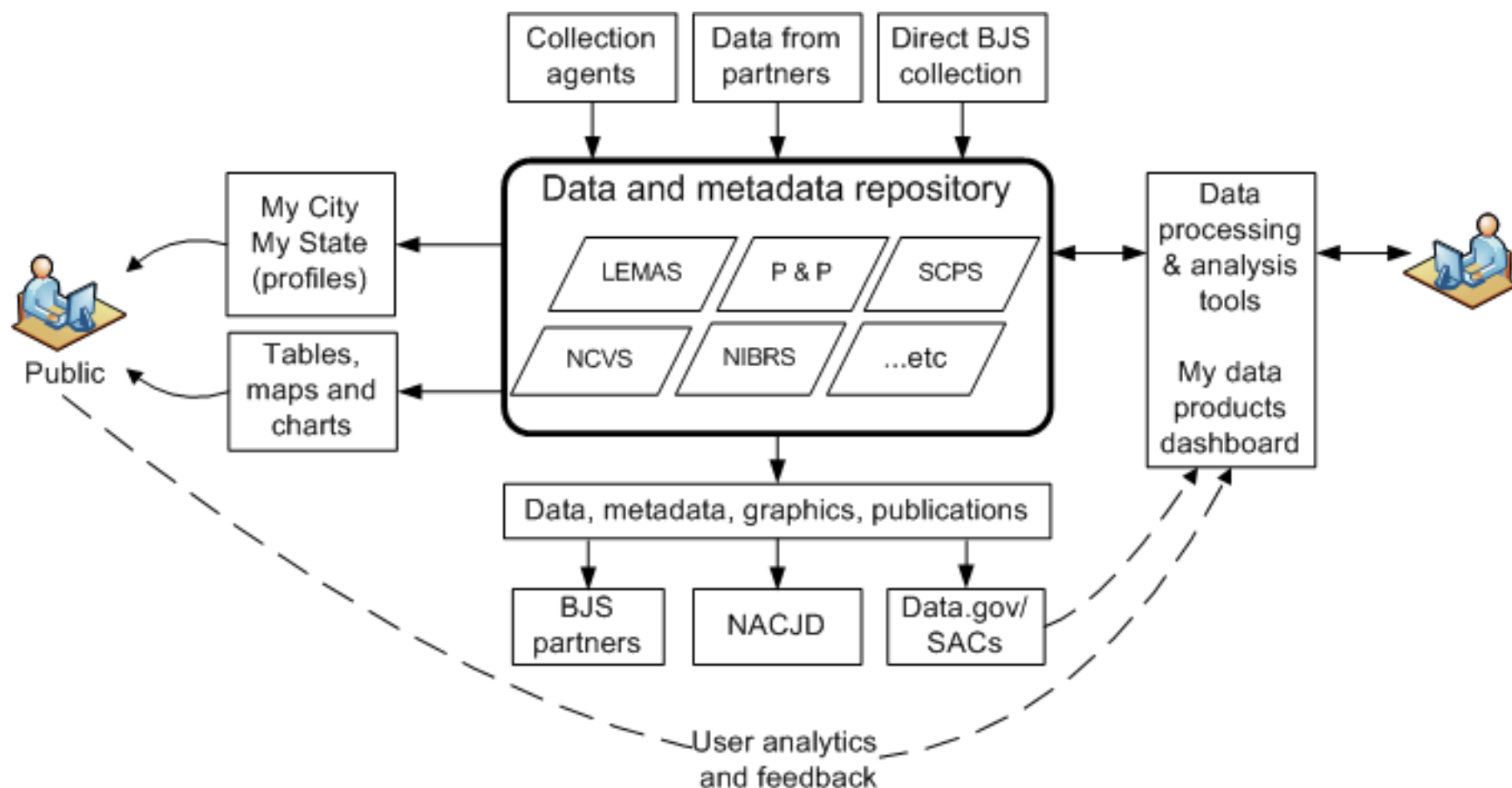
  - ❖ Met OMB Digital Strategy milestone for DOJ

- ❖ Lessons learned:

  - ❖ Many one-off solutions would be costly and time-consuming

  - ❖ APIs could serve many additional purposes

  - ❖ BJS customized solution wasn't re-usable

Integrated Data Management Model

A set of integrated IT systems using a comprehensive data and metadata warehouse as the engine and single data source for achievement of a variety of objectives:

- ❖ Data collection tracking system

- ❖ External data catalog and visualization tools

- ❖ Dashboards for operational planning

- ❖ Shared services and standards

Data Collection Tracking System

❖ Portal to data, metadata, surveys, and products by collection

❖ Uses the OMB Common Core Metadata Schema

❖ Dedicated data stewards ensure accuracy and security

External Data Catalog and Visualization Tools

❖ Single API solution used for all datasets in the catalog

❖ Integrates directly with internal collection tracking system

❖ Improved access to comprehensive listing of all available data

❖ Data visualization tools available for all datasets

Dashboards for operational planning

- ❖ Integrates information from multiple systems:

  - ❖ Data collection tracking system

  - ❖ Budget planning and tracking system

  - ❖ Product tracking system

  - ❖ Staff and subject matter experts list

  - ❖ Customer analytics and performance metrics

- ❖ Allow agency leaders to prioritize investments and use of limited staff resources based on data showing optimal ROI

Shared Services

❖ Shared OJP web services platform

❖ Common data catalog and taxonomy

❖ Open Data services framework for use throughout DOJ

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